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AIR FORCE PACKAGING EVALUATION AGENCY WRIGHT-PATTERSON--ETC F/G 13/4
DEVELOPMENT OF DYNAMIC CUSHIONING CURVES FOR TYPE III FAST PACK--ETC(U)
APR 78 R V BROWN

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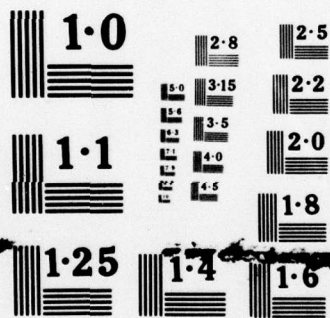
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INTERIM REPORT

AIR FORCE ACQUISITION LOGISTICS DIVISION
AIR FORCE PACKAGING EVALUATION AGENCY
WRIGHT-PATTERSON AIR FORCE BASE, OHIO 45433

DATE 21 APR 1978

AFALD/PTP T

REPORT NO. 78-4

PROJECT NO. 78-P7-4

TITLE: DEVELOPMENT OF DYNAMIC CUSHIONING CURVES FOR TYPE III FAST PACK,
(TPO-500-8089)

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ABSTRACT:

1. This Fast Pack evaluation was conducted in support of the Air Force Fast Pack program to update its inventory of Type III Fast Packs.
2. This pack (TPO-500-8089) was obtained from Warner Robins Air Logistics Center (DSPC), and was constructed according to the attached Transportation Packaging Order (Atch 1). The container I.D. was 30" x 27" x 14". Convuluted polyurethane, 3 3/4" thick was used on all faces.
3. The test load was constructed of 3/4 inch thick plywood with dimensions of 24" x 21" x 8". The triaxially mounted accelerometers were located at the center of gravity (C.G.).
4. The instrumentation and general procedure used to develop the peak G-static stress curves (Atch 2) were the same as those used for testing the previous Type III Fast Packs (see DSPT Report No. 76-1). The drop height used for testing was 30 inches.

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JACK E. THOMPSON
Director, Air Force
Packaging Evaluation
Agency

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5. The results show that this pack will protect an item approximately 24" x 21" x 8", weighing from 26 to 50 lbs., to a minimum fragility of about 30 G's. No heavier than a 50 lb. item should be packed in this container because of the sharp increase in G levels.

Richard V. Brown

RICHARD V. BROWN

Mechanical Engineering Technician

Air Force Packaging Evaluation Agency

2 Atch

1. TPO-500-8089

2. Peak G-Static
Stress Curves

ACCESSION for	
NTIS	White Section <input checked="" type="checkbox"/>
DDC	Buff Section <input type="checkbox"/>
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JUSTIFICATION.....	
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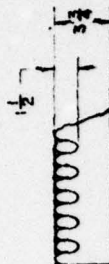
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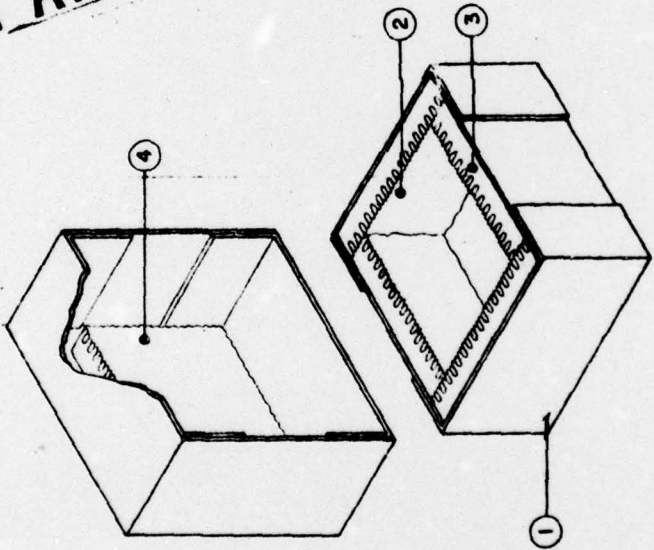
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BY	74
REVISIONS	
DESCRIPTION	
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- CUSHIONING
- DETAIL

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CONTAINER AND PACKING:
100 MIL-P-116.

REMARKS: THE PACKAGING
LEVELS A AND B
SHALL BE IDENTICAL
WITHIN THE 100 MIL-P-116.

LEVEL C:
SAME AS LEVELS A AND B EXCEPT THAT
P/N 6.1.1 MAY BE OMITTED.

PRESENTATION COMMENTS:
VA

CUSHIONING AND/OR PACKING:
SEE MATERIAL LIST.

PACKING:
LEVELS A, B & C:
LAYING SHALL BE IN BASIC DESIGN
SPECIFIED AND SHOWN HEREIN.

NOTES:
1. PACKING FOR SHIPMENT AND STORAGE
SHALL BE ACCOMPLISHED IN MIL-STD-129
AND AS SPECIFIED HEREIN. SIZE, LOCATION
AND METHOD OF APPLICATION NOT SPECIFIED
HEREIN OR IN MIL-STD-129 SHALL BE
PACKER'S OPTION.

2. EXTERIOR CONTAINER IDENTIFICATION AND
CONTRACT DATA:
A. "REMARKS" CONTAINER DO NOT DESTROY"
ON ONE END AND ONE SIDE.
B. "REMARKS" CONTAINER DO NOT DESTROY"
ON ONE END AND ONE SIDE.
C. "METHOD OF PACKING" FOR LEVELS
A & B PRESERVATION AND PACKAGING.

EXTERIOR CONTAINER:
TYPE
P/N 6.1.1

SIZE
2.0, 30 X 27 X 14
0.0, 31 X 28 X 15

DATE: 8/12/74
BY: 74

NOTES:
1. UNLESS OTHERWISE SPECIFIED, REMARKABLE
MATERIALS SHALL BE PRESERVED, PACKED,
AND SHIPPED AS SPECIFIED FOR LEVEL C.
2. CONTAINER SHALL BE IDENTIFIED BY
BY MARKING WITH P/N 6.1.1. MARKING SHALL BE
POSITIONED FOUR INCHES FROM EACH END OF
CONTAINER.

3. SPECIFICATION ORIGIN: DATA AND
OPTION NOT SPECIFIED (TYPE, CLASS, GRADE,
P/N, etc.) SHALL BE IDENTICAL WITHIN CONTAINER.
4. LAYERS COMPOSED WITHIN CONTAINER
USING P/N 10.

5. SHIP COMMENTS AND PRETREATMENTS SHALL
BE COMPLETED WITH P/N 6.1.1 TO PREVENT
DAMAGE OF MATERIAL.

6. CONTAINER SHALL BE FILLED WITH P/N 6.1.1
IMMEDIATELY AFTER WITHIN CONTAINER.

ITEM	DESCRIPTION	QUANTITY	REMARKS
10	100 MIL-P-116	100	
11	100 MIL-P-116	100	
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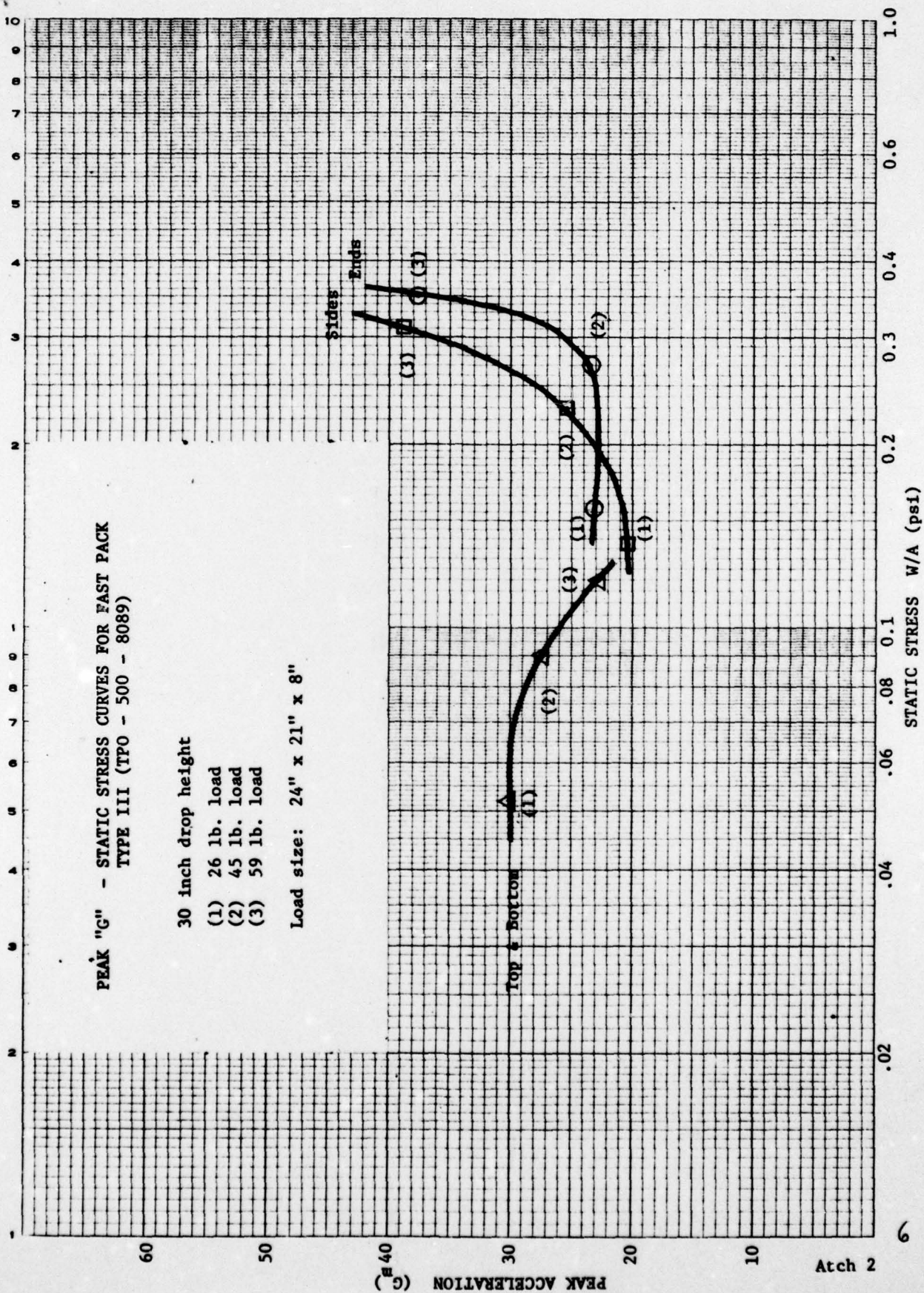
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WARRIOR ROOMS ALC			
STANDARD PACK TYPE III			
C 98752		770 500-8089	
DATE		7 Nov 74	
BY		7 Nov 74	
APPROVED			
REMARKS			
APPLICATION			

PEAK "G" - STATIC STRESS CURVES FOR FAST PACK
TYPE III (TPO - 500 - 8089)

30 inch drop height

- (1) 26 lb. load
- (2) 45 lb. load
- (3) 59 lb. load

Load size: 24" x 21" x 8"



Unclassified

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER PTPT Report No. 78-4 ✓	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
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18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Packaging; Fast Pack; Container; Cushioning Performance Curves		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Completed pack dynamic cushioning curves have been developed for the Type III Fast Pack (TPO-500-8089). General test procedures and drop height were based on Test Method 5007, "Drop Test (Free Fall)", contained in Federal Test Method Standard 101B. This container will protect an item approximately 24" x 21" x 8", weighing from 26 to 50 lbs., to a minimum fragility of about 30 G's.		

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